REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. Claims 1 and 22 are amended. The revisions to claims 1 and 22 are supported, for example, at page 10, line 35 through page 11, line 7 in the specification. Claims 1-22 are pending, with claims 1 and 22 being independent.

Claim rejections - 35 U.S.C. § 102

Claims 1-11 and 19 stand rejected being unpatentable over U.S. Patent No. 6,512,608 (Ohyama). Applicants respectfully traverse this rejection.

Independent claim 1 is directed to an optical head device that is configured to carry out reproduction or recording with respect to a plurality of optical information recording media of various types of pit rows or guide grooves. A plurality of semiconductor lasers are disposed on one substrate and provided so as to correspond respectively to the plurality of optical information recording media of various types of pit rows or guide grooves. The plurality of semiconductor lasers are disposed so that beam spots, formed on the optical information recording medium, of light beams emitted from the plurality of semiconductor lasers are aligned substantially parallel to a pit-row direction or a guide groove direction in the optical information recording medium.

By this arrangement, even when an objective lens shifts to follow a track in a radial direction in the optical disk, a radial-shift characteristic of the optical disk varies symmetrically with respect to the neutral position of the objective lens. Accordingly, a stable tracking operation can be performed without regard to which semiconductor laser is used. Therefore, the optical head device can perform reproduction or recording accurately with respect to a plurality of optical information recording media.

Ohyama does not teach or suggest these features. Ohyama is directed to an optical device. However, Ohyama does not teach or suggest that a plurality of semiconductor lasers are disposed so that beam spots, formed on the optical information recording medium, of light beams emitted from the plurality of semiconductor lasers are aligned substantially *parallel* to a pit-row direction or a guide groove direction in the optical information recording medium. See, for example, Figure 10 of the present application. Rather, Ohyama discloses first and second light sources (**25, 27**) that form beam spots that are aligned *perpendicularly* to grooves or pit rows on a disk. See, for example, col. 19, lines 52-60 and Figure 14. Accordingly, Ohyama does not

teach or suggest beam spots formed by light beams emitted from the plurality of semiconductor lasers are aligned substantially parallel to a pit-row direction or a guide groove direction in the optical information recording medium.

Applicants therefore submit that claim 1 is allowable over the cited reference. In addition, claims 2-11 and 19 depend from claim 1, and are believed allowable for at least the same reasons.

Claims 1-3, 6, 10, 11, 15, and 22 stand rejected being unpatentable over U.S. Patent No. 5,963,515 (Shindo). Applicants respectfully traverse this rejection.

Shindo does not disclose or suggest at least the above features of claim 1. Shindo is directed to an optical head tracking error detection device. However, Shindo does not teach or suggest that a plurality of semiconductor lasers are disposed on one surface and are provided so that beam spots, formed on the optical information recording medium, of light beams emitted from the plurality of semiconductor lasers are aligned substantially parallel to a pit-row direction or a guide groove direction in the optical information recording medium. Rather, Shindo discloses that laser beams are emitted in different directions and the semiconductor lasers are formed on different substrates. Moreover, the semiconductor lasers of Shindo cannot form beam spots of light beams emitted from a plurality of semiconductor lasers that are aligned substantially parallel to a pit-row direction or a guide groove direction in the optical information recording medium.

Applicants therefore submit that claim 1 is allowable over the cited reference. In addition, claims 2, 3, 6, 10, 11, and 15 depend from claim 1, and are believed allowable for at least the same reasons.

Independent claim 22 is directed to an optical recording and reproducing apparatus comprising an optical head device. The optical head device of claim 22 has the same features as those recited in claim 1. Accordingly, claim 22 is believed allowable over the cited reference for at least the same reasons as provided above with respect to claim 1.

Claim rejections - 35 U.S.C. § 103

Claims 1-6, 14-17, 19, and 22 stand rejected being unpatentable over U.S. Patent No. 5,886,964 (Fujita) in view of U.S. Patent No. 6,646,975 (Uchizaki). Applicants respectfully traverse this rejection.

Fujita does not disclose or suggest at least the above features of claim 1, which are also included in claim 22. Fujita does not teach or suggest that a plurality of semiconductor lasers are disposed on one surface. Rather Fujita simply discloses that two semiconductor lasers can emit beams simultaneously to detect a signal from a disk. Moreover, Fujita is even more removed from the present invention as Fujita does not disclose any applicability of its structure with respect to recording media of different formats.

Uchizaki does not remedy the deficiencies of Fujita. Uchizaki is directed to a device that forms light beams that are aligned in a direction *perpendicular* to pit rows or guide grooves. See col. 9, lines 24-33 and Figure 2. Accordingly, Fujita and Uchizaki are not directed to the present invention, and the present invention cannot be realized through any combination of these references.

Applicants therefore submit that claims 1 and 22 are allowable over the cited references. In addition, claims 2-6, 14-17, and 19 depend from claim 1, and are believed allowable for at least the same reasons.

Claim 18 stands rejected being unpatentable over Fujita in view of Uchizaki and U.S. Patent No. 5,734,637 (Ootaki). Applicants respectfully traverse this rejection.

Claim 18 depends from claim 1, which is allowable over Fujita and Uchizaki for the reasons discussed above. Ootaki does not remedy the deficiencies of Fujita and Uchizaki. Accordingly, Applicants respectfully submit that claim 18 is allowable over the cited references for at least the reason that it is dependent upon an allowable base claim.

Claims 20 and 21 stand rejected being unpatentable over Fujita in view of Uchizaki and U.S. Patent No. 6,552,990 (Kajiyama). Applicants respectfully traverse this rejection.

Claims 20 and 21 depend from claim 1, which is allowable over Fujita and Uchizaki for the reasons discussed above. Kajiyama does not remedy the deficiencies of Fujita and Uchizaki. Accordingly, Applicants respectfully submit that claims 20 and 21 are allowable over the cited references for at least the reason that they are dependent upon an allowable base claim.

Claims 1, 2, and 6-9 stand rejected being unpatentable over U.S. Patent No. 5,881,035 (Ueyama) in view of Uchizaki. Applicants respectfully traverse this rejection.

Ueyama is directed to an optical pickup device. However, Ueyama does not teach or suggest that a plurality of semiconductor lasers are disposed on one surface.

Uchizaki does not remedy the deficiencies of Ueyama. Uchizaki is directed to a device that forms light beams that are aligned in a direction *perpendicular* to pit rows or guide grooves. See col. 9, lines 24-33 and Figure 2. Accordingly, the present invention cannot be realized through any combination of these references.

Applicants therefore submit that claim 1 is allowable over the cited references. In addition, claims 2 and 6-9 depend from claim 1, and are believed allowable for at least the same reasons.

Claims 1, 12, and 13 stand rejected being unpatentable over U.S. Patent No. 5,648,951 (Kato) in view of Uchizaki. Applicants respectfully traverse this rejection.

Kato is directed to an optical head device. However, Kato does not teach or suggest that beam spots of light beams are emitted from the plurality of semiconductor lasers that are aligned substantially parallel to a pit-row direction or a guide groove direction in the optical information recording medium. In contrast, Kato is directed to a single semiconductor laser device. See, for example, Figure 15(a), element **1**. Accordingly, Kato does not teach or suggest the plurality of semiconductor lasers, as required by the claims.

Uchizaki does not remedy the deficiencies of Ueyama. Uchizaki is directed to a device that forms light beams that are aligned in a direction *perpendicular* to pit rows or guide grooves. See col. 9, lines 24-33 and Figure 2. Accordingly, the present invention cannot be realized through any combination of these references.

Applicants therefore submit that claim 1 is allowable over the cited references. In addition, claims 12 and 13 depend from claim 1, and are believed allowable for at least the same reasons.

In view of the above, favorable reconsideration in the form of a notice of allowance is requested.

Respectfully submitted,

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